REMARKS

The final Office Action dated October 3, 2006, and the patents cited therein have been carefully reviewed, and in view of the above changes and following remarks reconsideration and allowance of all the claims pending in the application are respectfully requested.

Claims 1-20, 22-24 and 26 are pending. Claims 1, 7, 10, 15 and 20 have been amended. Claims 21 and 25 have been canceled.

The Amendments To The Claims

Claims 1, 7, 10, 15 and 20 have been amended to better distinguish the claimed subject matter over the applied art. In particular, each of claims 1, 7, 10, 15 and 20 have been amended to include the concept of a data record write having a sequential identification that is prior to or equal to and not later than the sequential identification of the claimed log record write. Regarding claim 20, Applicant has similarly amended claim 20 to also include limitations of claim 21, which has been accordingly canceled. Support for the amendments to claims 1, 7, 10, 15 and 20 can be found throughout the specification, for example, at least at in paragraphs [16]-[22] and in Figures 2-4 of the originally filed patent application.

Additionally, Applicant has canceled claim 25 and has included a status identifier for canceled claim 25

The Objection To The Claims

The numbering of the claims is not in accordance with 37 C.F.R. § 1.125, which requires the original numbering of the claims to be preserved throughout the prosecution.

As described above, Applicant has canceled claim 25 and has included a status identifier for canceled claim 25.

Consequently, Applicant respectfully requests that the Examiner withdraw this objection.

The Rejection Under 35 U.S.C. § 103(a) Over Yanai In View of Shomler

Claims 1-24 and 26 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Yanai et al. (Yanai), U.S. Patent No. 6,502,205 B1, in view of Shomler, U.S. Patent No. 5,623,599.

Applicant respectfully traverses this rejection. Applicant respectfully submits that the subject matter according to any of claims 1-21, 22-24 and 26 is patentable over Yanai in view of Applicant respectfully submits that even if the applied patents are properly Shomler. combinable, the method and system resulting from the combination of Yanai and Shomler is not the claimed subject matter.

Regarding claim 1, neither Yanai nor Shomler disclose or suggest a method comprising asynchronously remotely copying each data record write having a sequential identification that is prior to or equal to and not later than the sequential identification of the log record write corresponding to the received acknowledgement.

The Examiner still admits that Yanai is silent regarding most of claim 1. (See final Office Action dated October 3, 2006, page 3, lines 12-19.)

Regarding Shomler, a copy process 16' creates a marker message token in response to a marker request event. (See Shomler, column 9, lines 21-28.) Copy process 16' sends the marker message token to a secondary subsystem 18', which records the message marker token in a control info log and a pending write queue. (See Shomler, column 9, lines 26-32.) When all of the data up to the point of the marker in the pending write queue has been secured, either in the control info log or on secondary-copy DASD, a secondary copy process, identified as "Data Mover" in the figures, creates an acknowledgement message referencing the specific marker token and returns that message to the primary copy process. (See Shomler, column 9. lines 33-37.)

Thus, Shomler receives an acknowledgement at the primary site for when all of the data up to the point of the marker in the pending write queue has been secured, as acknowledged by the Examiner. (See final Office Action dated October 3, 2006, page 24, lines 1-11.) That is, Shomler receives at the primary site an acknowledgement of extra data, as admitted by the Examiner. (See final Office Action dated October 3, 2006, page 24, lines 7-11.) For at least the

reason that Shomler receives at the primary site an acknowledgement of extra data, Applicant respectfully submits that Shomler cannot disclose or suggest asynchronously remotely copying each data record write having a sequential identification that is prior to or equal to and not later than the sequential identification of the log record write corresponding to the received acknowledgement.

Thus, Applicant respectfully submits that claim 1 is allowable over Yanai in view of Shomler. It follows that claims 2-6, which each incorporate the limitations of claim 1, are allowable over Yanai in view of Shomler for at least the same reasons that claim 1 is considered allowable

Regarding claim 7, Applicant respectfully submits that neither Yanai nor Shomler disclose or suggest a method comprising asynchronously receiving a data record write at the remote site from the primary site, such that each received data record write has a sequential identification that is prior to or equal to and not later than the sequential identification of the log record write corresponding to the received acknowledgement. As demonstrated above, the Examiner admits that Yanai is silent regarding most of the claimed subject matter, and that Shomler receives an acknowledgement at the primary site for when all of the data up to the point of the marker in the pending write queue has been secured. That is, Shomler receives at the primary site an acknowledgement of extra data. Accordingly, Shomler does not disclose or suggest asynchronously receiving a data record write at the remote site from the primary site, such that each received data record write has a sequential identification that is prior to or equal to and not later than the sequential identification of the log record write corresponding to the received acknowledgement.

Thus, claim 7 is allowable over Yanai in view of Shomler. It follows that claims 8 and 9, which incorporate the limitations of claim 7, are each allowable over Yanai in view of Shomler for at least the same reasons that claim 7 is considered allowable.

Regarding claim 10, Applicants respectfully submit that neither Yanai nor Shomler disclose or suggest the claimed primary site asynchronously remotely copying to the claimed remote site each data record write having a sequential identification that is prior to or equal to and not later than the sequential identification of the log record write corresponding to the received acknowledgement. As demonstrated above, the Examiner admits that Yanai is silent regarding most of the claimed subject matter, and that Shomler receives an acknowledgement at the primary site for when <u>all</u> of the data up to the point of the marker in the pending write queue has been secured. That is, Shomler receives at the primary site an acknowledgement of extra data. Accordingly, Shomler does not disclose or suggest the claimed primary site asynchronously remotely copying to the claimed remote site each data record write having a sequential identification that is prior to or equal to and not later than the sequential identification of the log record write corresponding to the received acknowledgement.

Thus, claim 10 is allowable over Yanai in view of Shomler. It follows that claims 11-14, which each incorporate the limitations of claim 10, are each allowable over Yanai in view of Shomler for at least the same reasons that claim 10 is considered allowable.

Regarding claim 15, Applicant respectfully submits that neither Yanai nor Shomler disclose or suggest the claimed controller receiving an acknowledgement corresponding to a log record write that has been completed at the remote site and, in response, asynchronously remotely copying to the remote site each data record write having a sequential identification that is prior to or equal to and not later than the sequential identification of the log record write corresponding to the received acknowledgement. As demonstrated above, the Examiner admits that Yanai is silent regarding most of this claim, and that Shomler receives an acknowledgement at the primary site for when all of the data up to the point of the marker in the pending write queue has been secured. That is, Shomler receives at the primary site an acknowledgement of extra data. Accordingly, Shomler does not disclose or suggest the claimed controller receiving an acknowledgement corresponding to a log record write that has been completed at the remote site and, in response, asynchronously remotely copying to the remote site each data record write having a sequential identification that is prior to or equal to and not later than the sequential identification of the log record write corresponding to the received acknowledgement.

Thus, claim 15 is allowable over Yanai in view of Shomler. It follows that claims 16-19, which each incorporate the limitations of claim 16, are each allowable over Yanai in view of

Shomler for at least the same reasons that claim 15 is considered allowable.

Regarding claim 20, Applicant respectfully submits that neither Yanai nor Shomler disclose or suggest the claimed controller further asynchronously receiving a data record write from the primary site, such that each received data record write comprises a sequential identification that is prior to or equal to and not later than the sequential identification of the log record write corresponding to the received acknowledgement. As demonstrated above, the Examiner admits that Yanai is silent regarding most of this claim, and that Shomler receives an acknowledgement at the primary site for when all of the data up to the point of the marker in the pending write queue has been secured. That is, Shomler receives at the primary site an acknowledgement of extra data. Accordingly, Shomler does not disclose or suggest the claimed controller further asynchronously receiving a data record write from the primary site, such that each received data record write comprises a sequential identification that is prior to or equal to and not later than the sequential identification of the log record write corresponding to the received acknowledgement.

Thus, claim 20 is allowable over Yanai in view of Shomler. It follows that claims 22-24 and 26, which each incorporate the limitations of claim 20, are each allowable over Yanai in view of Shomler for at least the same reasons that claim 20 is considered allowable.

Consequently, Applicant respectfully requests that the Examiner withdraw this rejection.

The Rejection Under 35 U.S.C. § 103(a) Over Yanai In View of Shomler And Further In View Of Asserted "Prior Art"

Claims 1-24 and 26 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Yanai in view of Shomler, and further in view of asserted "prior art," i.e., paragraphs [0004-0006] (of Patent Application Publication 2005/0114407 A1 to Goyal).

Applicant respectfully traverses this rejection. Moreover, Applicant respectfully traverses the Examiner assertion that Applicant admits the "prior art" of paragraphs [0004-0006] (of Patent Application Publication 2005/00114407 A1 to Goyal). Applicant respectfully submits that paragraphs [0004-0006] (of Patent Application Publication 2005/00114407 A1 to Goyal) immediately follow the heading "2. Description of the Related Art," <u>not</u> the heading "2. Description of the Prior Art." Thus, the Examiner's assertion that Applicant has admitted paragraphs [0004-0006] (of Patent Application Publication 2005/00114407 A1 to Goyal) as prior art is without basis. For at least this reason alone, it follows that the applied rejection is without hasis

Further, Applicant respectfully submits that none of Yanai, Shomler and the Examiner's asserted "prior art" disclose or suggest the claimed subject matter of claims 1-20, 22-24 and 26. In particular, Applicant respectfully submits that the Examiner asserted "prior art" does not cure the deficiencies of Yanai and Shomler with respect to any of claims 1, 7, 10, 15 and 20, the base claims of the rejected claims. That is, the Examiner's asserted "prior art" does not disclose or suggest the concept of a data record write having a sequential identification that is prior to or equal to and not later than the sequential identification of the claimed log record write.

Thus, each of claims 1-20, 22-24 and 26 are allowable over Yanai in view of Shomler, and further in view of the Examiners asserted "prior art."

CONCLUSION

In view of the above amendments and arguments which present the claims in better form for consideration on appeal, it is urged that the present application is now in condition for allowance. Should the Examiner find that a telephonic or personal interview would expedite passage to issue of the present application, the Examiner is encouraged to contact the undersigned attorney at the telephone number indicated below.

It is requested that this application be passed to issue with claims 1-20, 22-24 and 26.

Respectfully submitted,

Date: February 5, 2007

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